RECEIVED
CENTRAL FAX CENTER
JUL 11 2007

Amendments to the Claims:

This listing of claims reflects all claim amendments and replaces all prior versions, and listings, of claims in the application. Material to be inserted is in **bold and underline**, and material to be deleted is in ~~strikeout~~ and/or in [[double brackets]] if the deletion would be difficult to see.

LISTING OF CLAIMS:

1. (Currently amended) A method for controlling an engine coupled to an emission control device susceptible to sulfur contamination, the method comprising:

deciding whether to reduce sulfur contamination in the device based on at least an operating condition;

in response to a decision to reduce sulfur contamination:

raising temperature of the device by adjusting engine operation; and

when said temperature reaches a preselected value, oscillating an air-fuel ratio entering the device between rich and lean to reduce said sulfur contamination, where a peak allowable amplitude of said air-fuel oscillations is determined based on temperature, **where said peak allowable amplitude decreases as temperature increases, and where said air-fuel ratio oscillations are maintained below said peak value to prevent operation that could increase platinum particle size**.

2. (Cancelled)

3. (Original) The method of claim 1 further comprising increasing a period of oscillations as an amplitude of oscillations is decreased.

4. (Original) The method of claim 1 wherein said lean and rich oscillation is asymmetric.

5. (Original) The method of claim 4 wherein a time integral of said lean oscillation is equal to a time integral of said rich oscillation.

6. (Original) The method of claim 1 wherein said lean and rich oscillation is symmetric.

7. (Original) The method of claim 1 wherein said amplitude of said air-fuel oscillations is also based on an oxygen storage amount of an upstream emission control device located upstream of the emission control device.

8. (Original) The method of claim 1 further comprising adjusting a period of oscillations based on operating conditions.

9. (Original) The method of claim 1 wherein said temperature includes at least one of temperature of the device and exhaust gas temperature.

10. (Original) The method of claim 1 wherein said raising temperature of the device by adjusting engine operation includes exhaust air-fuel ratio between lean and rich to generate heat in an upstream device having oxygen storage capacity.

11. (Original) The method of claim 1 wherein said raising temperature of the device by adjusting engine operation includes operating a first group of cylinder lean and a second group of cylinders rich, with said rich and lean exhaust gas mixing to generate exothermic heat.

12. (Original) The method of claim 1 wherein said raising temperature of the device by adjusting engine operation includes retarding ignition timing.

13. (Currently amended) A system for controlling an engine, the system comprising:

a first emission control device coupled to the engine;

a second emission control device coupled to the engine, said second device susceptible to sulfur contamination and located downstream of said first device; and

a controller for deciding whether to reduce sulfur contamination in the second device based on at least an operating condition; in response to a decision to reduce sulfur contamination: raising temperature of the **second** device by

adjusting engine operation; and when said temperature reaches a preselected value, oscillating an air-fuel ratio entering the second device between rich and lean to reduce said sulfur contamination, where ~~an~~ **a peak allowable** amplitude of said air-fuel oscillations is determined based on exhaust temperature, where said **peak allowable** amplitude decreases as temperature increases, [[,]]**and where said air-fuel ratio oscillations are maintained below said peak value to prevent operation that could increase platinum particle size.**

14. (Original) The system of claim 13 wherein said controller increases a period of oscillations as an amplitude of oscillations is decreased.

15. (Original) The system of claim 14 wherein said lean and rich oscillation is asymmetric.

16. (Original) The system of claim 15 wherein a time integral of said lean oscillation is controlled to be equal to a time integral of said rich oscillation.

17. (Original) The system of claim 15 wherein said lean and rich oscillation is controlled to be symmetric.

18. (Original) The system of claim 15 wherein said controller adjusts an amplitude of said air-fuel oscillations based on an oxygen storage amount of said upstream emission control device.

19. (Original) The system of claim 18 wherein said controller further adjusts a period of oscillations based on operating conditions.

20. (Cancelled)

21. (New) A method for controlling an engine coupled to an emission control device susceptible to sulfur contamination, the method comprising:

deciding whether to reduce sulfur contamination in the device based on at least an operating condition;

in response to a decision to reduce sulfur contamination:

raising temperature of the device by adjusting engine operation;

when said temperature reaches a preselected value, oscillating an air-fuel ratio entering the device between rich and lean to reduce said sulfur contamination, where a peak allowable amplitude of said air-fuel oscillations is determined based on temperature, where said peak allowable amplitude decreases as temperature increases, and where said air-fuel ratio oscillations are

maintained below said peak value to prevent operation that could increase platinum particle size; and

increasing a period of oscillations as an amplitude of oscillations is decreased, wherein said lean and rich oscillation is asymmetric and the oscillations are controlled so that a time integral of said lean oscillation is equal to a time integral of said rich oscillation.